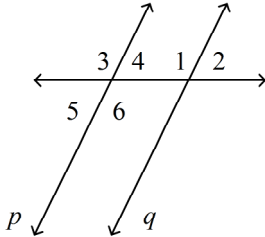
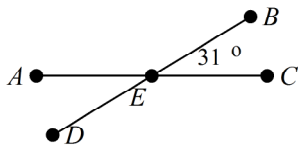


Geometry - Unit 2 Practice Exam for wiki - Kuhowski**Short Answer**

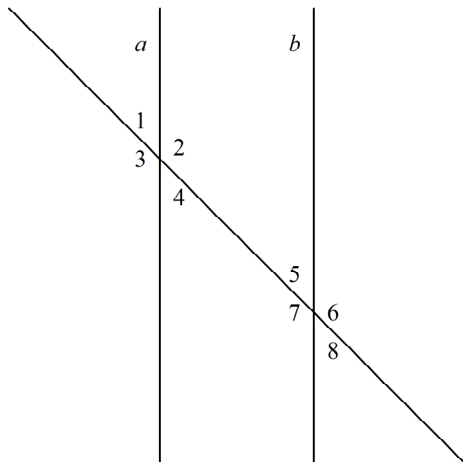
1. $m\angle 1 = 4x$ and $m\angle 3 = 116$. Find the value of x for p to be parallel to q . The diagram is not to scale.



2. Find the measure of $\angle AED$ for $m\angle BEC = 31^\circ$.



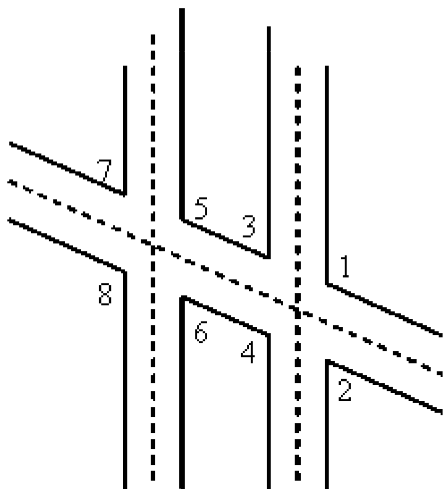
In the diagram $a \parallel b$. Use the diagram to answer the question.
(Diagram not to scale.)



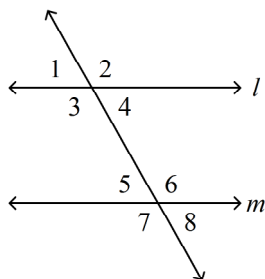
- Name the corresponding angle to $\angle 3$.
- If $m\angle 8 = 56^\circ$, what is $m\angle 6$?
- Name the alternate interior angle to $\angle 5$.
- Name the corresponding angle to $\angle 1$.

7. If $m\angle 8 = 5^\circ$, what is $m\angle 1$?

This diagram of airport runway intersections shows two parallel runways. A taxiway crosses both runways.



8. If $\angle 8$ measures 117, what is the sum of the measures of $\angle 1$ and $\angle 4$?
9. Find the value of the variable if $m \parallel l$, $m\angle 1 = 7x + 13$ and $m\angle 5 = 5x + 31$. The diagram is not to scale.

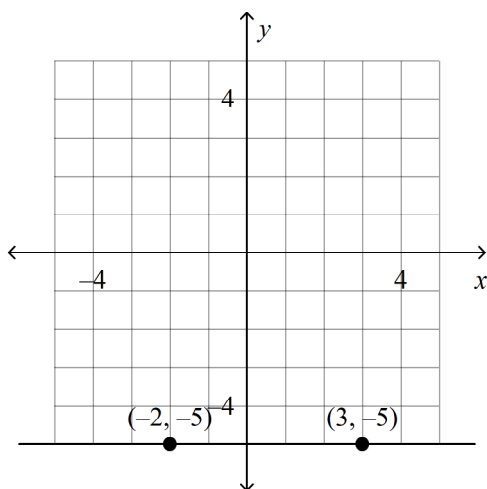


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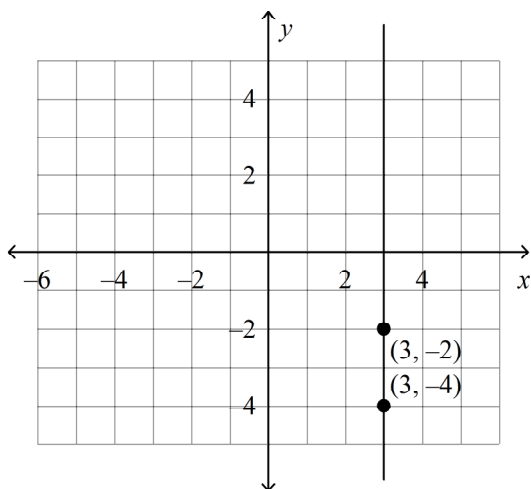
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Find the slope of the line.

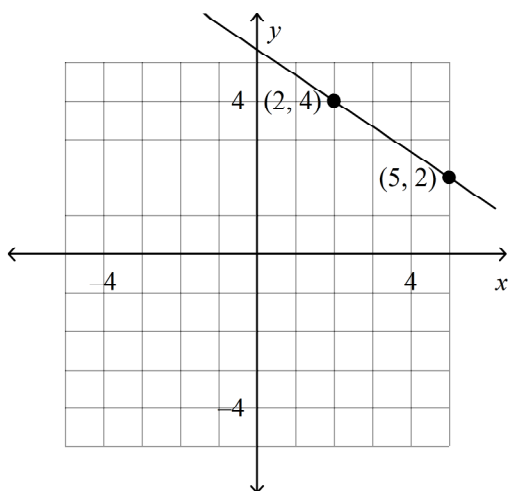
10.



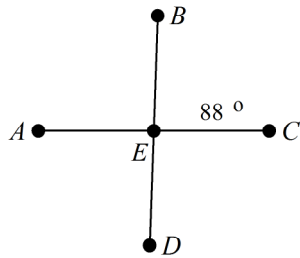
11.



12.



13. Find the measure of $\angle AED$ for $m\angle BEC = 88^\circ$.

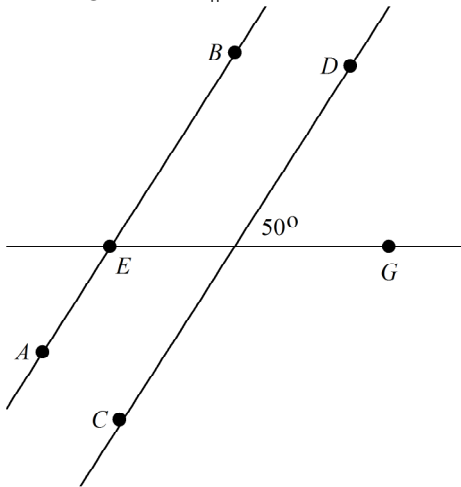


Find the slope of the line through the pair of points.

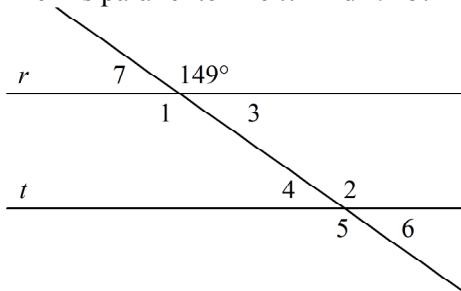
14. $A(3, -2), D(5, -2)$

15. $N(9, 7), D(-7, -3)$

16. In the figure, $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$. Find the measure of $\angle GEB$.

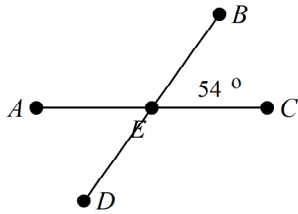


17. The complement of an angle is 64° . What is the measure of the angle?
18. Line r is parallel to line t . Find $m\angle 5$. The diagram is not to scale.

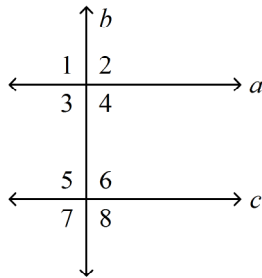


19. $\angle 1$ and $\angle 2$ are supplementary angles. $m\angle 1 = x - 16$, and $m\angle 2 = x + 82$. Find the measure of each angle.
20. $\angle DFG$ and $\angle JKL$ are complementary angles. $m\angle DFG = x + 3$, and $m\angle JKL = x - 9$. Find the measure of each angle.

21. Find the measure of $\angle AED$ for $m\angle BEC = 54^\circ$.



22. If $c \perp b$ and $a \parallel c$, what is $m\angle 3$?

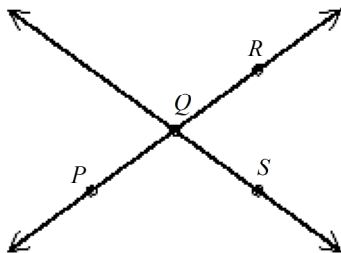


23. Find the distance between points $P(4, 1)$ and $Q(3, 6)$ to the nearest tenth.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ____ 24. What must be true about the slopes of two perpendicular lines, neither of which is vertical?
- The slopes have product -1 .
 - The slopes are equal.
 - One of the slopes must be 0 .
 - The slopes have product 1 .
- ____ 25. Are P , Q , and R collinear? If so, name the line on which they lie.



- No, the three points are not collinear.
- Yes, they lie on the line PR .
- Yes, they lie on the line QS .
- Yes, they lie on the line PS .

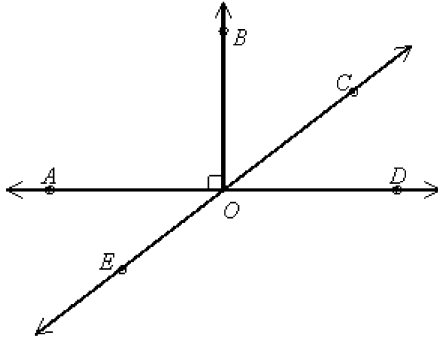
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____ 26. Is the line through points $P(-4, -2)$ and $Q(2, -3)$ perpendicular to the line through points $R(0, 9)$ and $S(-1, 3)$? Explain.

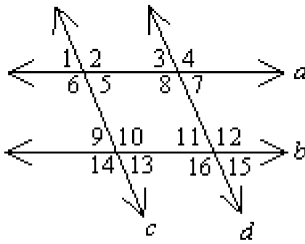
- a. No, their slopes are not reciprocals.
- b. Yes; their slopes are equal.
- c. Yes; their slopes have product -1
- d. No, their slopes are not opposite reciprocals.

____ 27. Name an angle supplementary to $\angle COD$.



- a. $\angle DOE$
- b. $\angle COB$
- c. $\angle AOE$
- d. $\angle BOD$

____ 28. Which angles are corresponding angles?



- a. $\angle 5$ and $\angle 1$
- b. $\angle 1$ and $\angle 9$
- c. $\angle 2$ and $\angle 1$
- d. none of these

____ 29. Which angle is an obtuse angle?

a.



b.



c.



d.



____ 30. Complete the statement. If a transversal intersects two parallel lines, then ____ angles are supplementary.

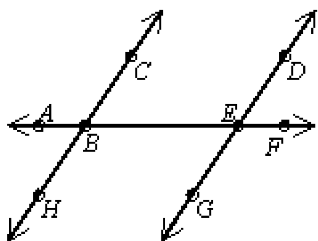
- a. corresponding
- b. alternate interior
- c. acute
- d. same-side interior

____ 31. Supplementary angles are two angles whose measures have sum ____.

Complementary angles are two angles whose measures have sum ____.

- a. 180; 90
- b. 90; 45
- c. 90; 180
- d. 180; 360

____ 32. Which statement is true?



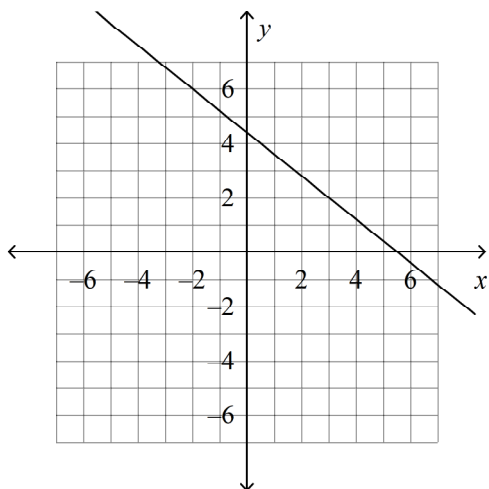
- a. $\angle CBE$ and $\angle BEG$ are same-side angles.
 - b. $\angle ABH$ and $\angle CBE$ are same-side angles.
 - c. $\angle ABH$ and $\angle CBE$ are alternate interior angles.
 - d. $\angle CBE$ and $\angle BEG$ are alternate interior angles.
- ____ 33. Complete the statement. If a transversal intersects two parallel lines, then ____.
- a. same-side interior angles are complementary
 - b. alternate interior angles are congruent
 - c. corresponding angles are supplementary
 - d. none of these

Name: _____

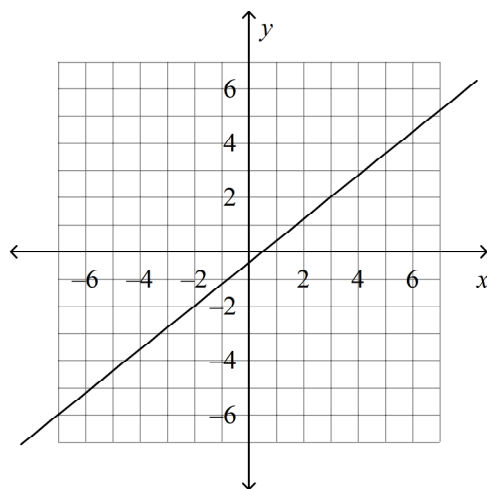
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____ 34. Graph the line that goes through point $(3, 2)$ with slope $-\frac{4}{5}$.

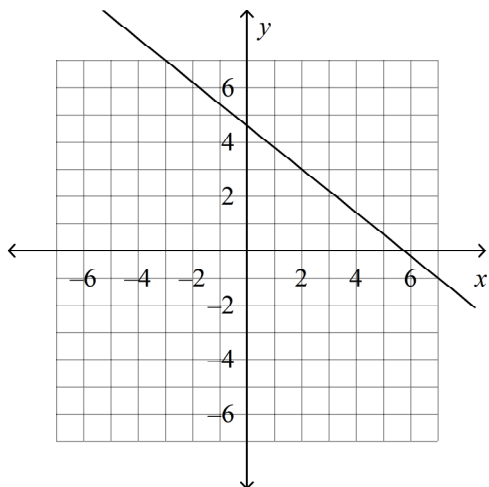
a.



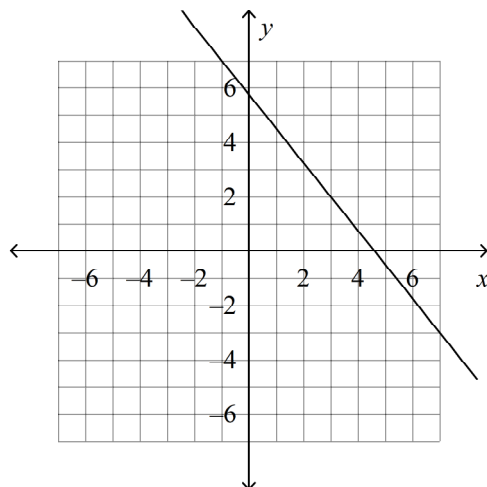
c.



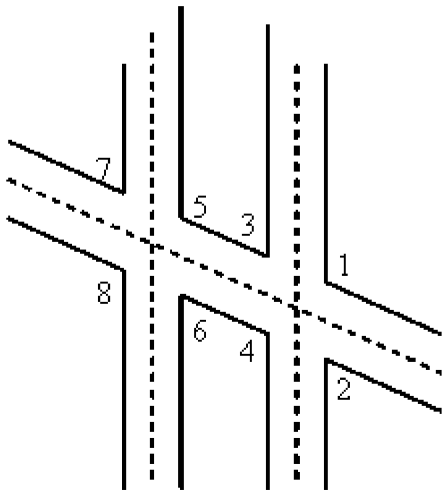
b.



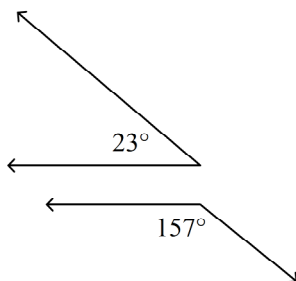
d.



This diagram of airport runway intersections shows two parallel runways. A taxiway crosses both runways.



- _____ 35. How are $\angle 5$ and $\angle 4$ related?
- corresponding angles
 - same-side interior angles
 - alternate interior angles
 - none of these
- _____ 36. Is the line through points $P(7, 4)$ and $Q(-2, -9)$ parallel to the line through points $R(4, -1)$ and $S(0, -2)$? Explain.
- Yes; the lines are both vertical.
 - Yes; the lines have equal slopes.
 - No, the lines have unequal slopes.
 - No, one line has slope, the other has no slope.
- _____ 37. How are the two angles related?



Drawing not to scale

- complementary
- adjacent
- vertical
- supplementary

Geometry - Unit 2 Practice Exam for wiki - Kuhowski

Answer Section

SHORT ANSWER

1. 29
2. 31°
3. $\angle 7$
4. 124°
5. $\angle 4$
6. $\angle 5$
7. 5°
8. 234
9. 9
10. 0
11. undefined
12. $-\frac{2}{3}$
13. 88°
14. 0
15. $\frac{5}{8}$
16. 50°
17. 26°
18. 149
19. $\angle 1 = 41$, $\angle 2 = 139$
20. $\angle DFG = 51$, $\angle JKL = 39$
21. 54°
22. 90
23. 5.1

MULTIPLE CHOICE

24. A
25. B
26. C
27. A
28. B
29. B
30. D
31. A
32. D
33. B
34. A

- 35. C
- 36. C
- 37. D